



EMERGENCY MANAGEMENT STRATEGIC PLAN

Howard County, Maryland





Letter from County Executive Allan H. Kittleman

The ability for Howard County to quickly respond to, recover from, and lessen the impact of emergency events and disasters is critical to the overall well-being and vitality of our great community. Howard County's successful preparedness is about much more than giving emergency officials the tools they need; it's also about community readiness. Emergency management is a shared responsibility and history has shown that government must collaborate with residents to effectively respond when the need arises. Throughout the State of Maryland, Howard County is known as a leader in public safety, which is another reason our County is consistently ranked as a great place to live and work.

As a lifelong resident of the County, I understand the importance of the critical services the County provides. I have seen firsthand that even in the toughest conditions, devoted County personnel take action to swiftly restore government services and keep residents, workers and visitors safe. This dedication, in addition to collaboration and support from community members, local businesses, nonprofits and special partnerships, has led to the success of our innovative Emergency Management Program.

The Howard County Emergency Management Strategic Plan is a comprehensive look at our Emergency Management Program and how we can continue to improve our capabilities. This Strategic Plan ensures that we look at the big picture to enhance the county's resiliency and strengthen our community relationships.

Overall, the county's Emergency Management Program reflects our commitment to keeping the community safe. Thank you for exploring this Strategic Plan. We encourage you to take action today by developing an emergency plan, for you as an individual, for your family, your business or other organizations.

Sincerely,

A handwritten signature in blue ink that reads "Allan H. Kittleman".

Allan H. Kittleman
Howard County Executive





Letter from Director Ryan Miller

I am excited to announce the completion of Howard County's Emergency Management Strategic Plan. In a landscape of evolving hazards, this Strategic Plan sets forth a path that builds upon our strengths and closes capability and planning gaps. Through collaboration with key partners and interactions with the community, we outlined a vision for the future of emergency management in Howard County.

Having grown up in Howard County, I know how important County services are to preserving our quality of life, especially when it comes to safety and minimizing disruption from disasters. Every day through emergency management, we strive to exceed your expectations for living, working, and visiting Howard County. There are three areas of our program that I would like to highlight:

1. We focus on a strong planning process, not just on writing plans.
2. We have a vertically and horizontally integrated Emergency Management Program that looks for opportunities to include others, seeks out the best sources of information, taps into subject matter experts, and recognizes national assets located here in the County.
3. We continuously reflect upon, assess, and adapt our strategies to ever changing hazards.

While we continue to close gaps and build upon our strengths, I look forward to a future where our program will be even more deeply rooted and connected to our great community, to the region, and to the nation through genuine partnerships. Help us accomplish this vision for the future by connecting with us on Facebook, visiting our website, and participating in our events and trainings.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. Miller".

Ryan A. Miller
Director





Introduction

Howard County has embarked on an ambitious strategic planning effort to enhance and better coordinate its homeland security and emergency management capabilities. The goal of this effort is to improve the County's ability to prevent, protect from, respond to, and recover from natural- and human-caused disasters through the development of a single, common preparedness vision and strategy. This strategic planning effort is designed to accomplish measurable results, ensure accountability, and assist senior leadership in directing programmatic efforts and establishing funding priorities. This planning effort will also help ensure that limited resources are properly allocated over the next five years, and that operational level staff from a variety of departments and organizations are provided with a common roadmap of coordinated emergency management activities.

This Strategic Plan is not intended to serve as tactical guidance for daily operations. Rather, this plan serves as a framework to provide, on a programmatic level, strategic direction on effectively allocating resources toward the County's emergency management program. This Plan is not meant as a reflection of emergency management capabilities that the County is successful at versus capabilities where the County needs improvement. Nor is the Plan a representation of all the emergency management and homeland security projects currently underway in the County or across the region. Instead, this Strategic Plan is meant to identify the areas on which Howard County will focus for the next five years.

Changes in available funding, organizational structure, and threat environment add to the complexity of preparedness and require emergency management and homeland security stakeholders to continually review, adjust, and develop new strategies. With this in mind, the Strategic Plan was designed to serve as a practical and flexible long-term guide that is able to direct both short- and long-term efforts to accomplish a single emergency management vision and mission. The strategic goals and objectives listed in the Strategic Plan will be updated by emergency management and homeland security stakeholders during an annual review of the Plan, or when necessary based on emerging threats.





Strategic Plan Development

The Strategic Plan was developed using the following steps:

- **GAP ANALYSIS**

A countywide emergency management planning gap analysis was conducted using a cross-walk of federal guidance, best practices, and Emergency Management Accreditation Program (EMAP) standards.

- **BENCHMARK DEVELOPMENT**

The findings of the gap analysis were used to develop the project scoping for the County's major planning initiatives that were broken down into two phases over a three to five year period. The project scoping consisted of the staffing requirements, the tentative timelines based on project staffing, and the general planning process, which included stakeholder and community engagement. County department heads and the Emergency Management Operational Group (EMOG) were respectively briefed on the major planning initiatives and project scoping to gain each group's input on planning objectives and tentative timelines of completion. Each month thereafter, both groups provided guidance and support to the core planning team's progress.

- **STRATEGIC GOALS AND DRAFT PLAN DEVELOPMENT**

An internal brainstorming session was conducted with personnel from the Howard County Office of Emergency Management using the completed gap analysis, project scoping results, and Federal Emergency Management Agency's (FEMA) core capabilities in order to create overarching goals and specific objectives for the County's emergency management program. These goals and objectives provided the framework for the Strategic Plan. Subsequently, a work session was conducted with county emergency management stakeholders to expand upon the County's long-term programmatic strategic goals and ensure overall continuity with other departmental strategic plans as well as the County's *PlanHoward 2030*. The draft Plan was reviewed by the stakeholders, and their comments were incorporated into the final Plan.

- **PLAN FINALIZATION AND IMPLEMENTATION**

Through EMOG, Howard County emergency management stakeholders reviewed and commented on the Strategic Plan as it was being developed and finalized. Stakeholder support and involvement was essential to Plan development and will continue to be essential throughout implementation.

- **PLAN EVALUATION**

The Howard County Office of Emergency Management and emergency management stakeholders through EMOG meetings annually evaluate the County's emergency management program. This process allows for the review and testing of post-incident reports, lessons learned, performance evaluations, and after action reports. The Strategic Plan defines the organizational mission and details the countywide programmatic goals and objectives to enhance an all-hazards approach. This process is integral to tracking and implementing corrective actions and thus, revising relevant plans, policies, and procedures.



Plan Integration

The development of *PlanHoward 2030*, the County's new general plan, provided a unique opportunity to coordinate and align plans horizontally at the county level. *PlanHoward 2030* presents a new, forward-looking approach and an exciting launch into a greener and more sustainable future for the Howard County community. *PlanHoward 2030* celebrates accomplishments and charts the next steps so that Howard County can continue to enhance its high quality of life. The plan highlights key issues and goals for future planning efforts. In other words, *PlanHoward 2030* is a framework that sets out a scope of work and policies for the next two decades. *PlanHoward 2030* is structurally organized into three major parts to address the three key aspects of sustainability – environment, economy, and community quality of life. While *PlanHoward 2030* places significant emphasis on green and sustainable development, truly sustainable development cannot be achieved without a component of hazard risk reduction. Many sustainability practices adopted by individuals and communities also serve to strengthen the overall resiliency of the County.

A countywide emergency management planning gap analysis was conducted using a cross-walk of federal guidance, best practices, and EMAP standards. The findings of the gap analysis were used to develop an integrative and all-encompassing platform for a countywide emergency management program. This platform provides a programmatic foundation for how the emergency management plans will align, and for the interdependencies associated with each mission area (Mitigation, Response, Recovery, Prevention/Protection) and corresponding plans. Since these plans are considered "living documents" and are continually under review and modification, it is important to note that at any given moment some of these plans might be in the development phase. Howard County's emergency management planning efforts will focus on ensuring both vertical planning integration (i.e., verifying that plans are consistent and in alignment with all levels of government – state, regional, and federal) and horizontal planning integration (i.e., ensuring that departmental emergency management plans throughout the County are aligned with the County's Strategic Plan and with *PlanHoward 2030*). The following graphic demonstrates the emergency management program planning process used by Howard County's emergency management program.





Ongoing Efforts in the Region

Howard County is part of the Baltimore Urban Area Security Initiative (UASI), which is comprised of the cities of Baltimore and Annapolis and the additional counties of Anne Arundel, Baltimore, Carroll, and Harford. The Baltimore UASI was established in 2003 to promote coordinated response and recovery operations across jurisdictional boundaries. The Baltimore UASI is governed by an Urban Area Working Group (UAWG). The Baltimore UAWG's purpose is to guide the delivery of direct services in the form of planning, organizing, equipping, training, exercising, and providing technical assistance for first responders and community stakeholders in the Baltimore Urban Area.

Baltimore UASI stakeholders, including Howard County, participate in the UASI to provide both representation and subject matter expertise through a series of committees and work groups. The UASI committee structure was revised in August 2013 to a "capability based" structure to address all of the federally established core capabilities as well as additional core capabilities created by the Baltimore UAWG. This new structure aligns with the federal core capabilities and fits with the recommended approach to organizing the Baltimore UASI Strategy in alignment with the National Preparedness Goal (NPG). The work groups and committees are organized as follows:

WORKGROUPS

- Regional On-Scene Operations – Operational initiatives and projects.
- Regional Coordination – Coordination within and among the UASI jurisdictions as well as with the National Capital Region.
- Regional Training and Exercise – Regional training and exercise programs.
- Grant and Fiscal – All grant and financial management issues.
- UASI Policy – Matters of governance, policy, and procedure.

COMMITTEES

Committees address specific areas as follows:

- Whole Community
- Special Operations
- Law Enforcement
- Emergency Management
- Health and Medical
- Public Information and Outreach
- Recovery
- Cybersecurity
- Interoperable Technology

The work groups and committees serve under the direction of the UAWG.

The Baltimore UASI Strategy's goals, objectives, and initiatives were designed to support member jurisdictions' (including Howard County's) local emergency preparedness and homeland security strategies, plans, and initiatives, as well as align with state and federal programs. Howard County's emergency planning efforts, including this Strategic Plan, are designed to ensure vertical alignment with the plans of the Baltimore UASI.



Hazard Identification, Risk & Vulnerability Assessment

This section provides a summary of the hazard risk assessment, likelihood estimates, consequence analyses, and local vulnerabilities that are detailed extensively in the Howard County Hazard Identification and Risk Assessment (HIRA). The HIRA reflects a whole-community approach to risk assessment in Howard County. The Howard County Office of Emergency Management in collaboration with a multi-disciplinary team of government leaders, private sector representatives, and citizen stakeholders leads all risk assessment efforts.

Twenty-six hazard categories have been identified as potential sources of harm or difficulty in Howard County. Hazard categories fall into three hazard types: Natural Hazards, Adversarial/Intentional Hazards, and Technological/Accidental Hazards. The latter two hazard types can be grouped together under the umbrella term Manmade Hazards, where Adversarial/Intentional Hazards are the result of deliberate actions, and Technological/Accidental Hazards are created by negligence, error, unintended failure, or human actions without harmful intent. The following hazard categories have been included in Howard County risk assessment efforts:

NATURAL HAZARDS

- Drought
- Earthquake
- Flood
- Hurricane / Tropical Storm
- Lightning
- Animal / Plant Infestation
- Severe Winter Storm
- Solar Storm
- Tornado / Wind Storm
- Wildfire

ADVERSARIAL / INTENTIONAL HAZARDS

- Chemical Attack
- Biological Attack
- Radiological Attack
- Nuclear Blast
- Active Shooter
- Cyber / Communications Infrastructure Attack
- Explosives
- Civil Unrest

TECHNOLOGICAL / ACCIDENTAL HAZARDS

- Utility Disruption
- Structure Fire
- Transportation Hazard
- Dam Failure
- Unintentional Chemical Substance Release / Hazmat
- Unintentional Biological Hazard
- Unintentional Radiological Substance Release
- Unintentional Cyber / Communications Infrastructure Failure



NATURAL HAZARDS

Drought

A drought is a condition of moisture deficiency sufficient to have an adverse effect over a sizeable area on vegetation, animals, and humans. It usually refers to a period of below-normal rainfall, but drought can also be caused by drying bores or lakes, or by anything that reduces the amount of liquid water available. On average there are one to two extreme heat events per year, with 21 events occurring between 1995 and 2011. Based on National Climatic Data Center (NCDC) historical data, extreme heat events will continue to occur in Howard County at least once annually, but with relatively minor impact to life and property.

Earthquake

An earthquake is a sudden release of energy in the earth's crust that creates seismic waves. Energy builds when tectonic plates become stuck and put strain on the ground. When the strain becomes so great that rocks give way, faults occur, releasing energy as an earthquake. At the earth's surface, earthquakes may manifest themselves by a shaking or displacement of the ground. Historically, there has been no record of earthquakes with an epicenter in Howard County, with the exception of a cluster of small earthquakes in 1993 in Allview Estates in Columbia. Additionally, Howard County has experienced minor shaking from earthquakes located outside of the region. On August 23, 2011, Maryland experienced the effects of a nearby earthquake when a 5.8 magnitude quake centered in Virginia impacted much of the East Coast.



Flood

Flooding is defined as the accumulation of water that exceeds a physical barrier or collects in a low lying area that leads to the inundation of an area. Flooding typically results from large-scale weather systems that generate prolonged, high impact rainfall. Other conditions such as winter snow thaws, over-saturated soil, ice jams breaking apart, and urbanization can cause flooding as well. The watershed of the Patapsco and the Patuxent Rivers are the origin of most flooding within Howard County. All rivers in the County are susceptible to both riverine and flash flooding.

Hurricane / Tropical Storm

Hurricanes, tropical storms, and typhoons are collectively known as tropical cyclones. The National Oceanic and Atmospheric Administration (NOAA) defines



NATURAL HAZARDS (CONTINUED)



a tropical cyclone as a “warm-core non-frontal synoptic-scale cyclone, originating over tropical or subtropical waters, with organized deep convection and a closed surface wind circulation about a well-defined center. Once formed, a tropical cyclone is maintained by the extraction of heat energy from the ocean at high temperature and heat export at the low temperatures of the upper troposphere.” According to NOAA’s GIS database, there have been 13 named tropical cyclones that have passed within 65 miles of Howard County between 1950 and 2008, with only one storm reaching hurricane strength. All of these storms were downgraded to either tropical storms or tropical depressions by the time they reached the Mid-Atlantic region, which is typical for this region.

Lightning

Lightning events are generated by atmospheric imbalance and turbulence due to a combination of conditions. Lightning, which occurs during all thunderstorms, can strike anywhere. Generated by the buildup of charged ions in a thundercloud, the discharge of a lightning bolt interacts with the best conducting object or surface on the ground. Howard County experiences a significant lightning event approximately once every two years. Averaging seven events over a period of 17 years equates to a 43% annual probability of future lightning occurrences.

Animal / Plant Infestation

Pest infestation is the occurrence of one or more pest species in an area or location where their numbers and impact are currently or potentially at intolerable levels. Howard County has had several incidents with bed bugs (*Cimex lectularius*) in recent years. These infestations have been limited and resolved fairly quickly. Other potential hazards in this category include blue-green algae in regional water reservoirs and infectious insects; however, there is no historical occurrence of these hazards in Howard County.

Severe Winter Storm

A winter storm is a weather event that produces forms of precipitation caused by cold temperatures, such as snow, sleet, ice, and freezing rain, while ground temperatures are cold enough to cause precipitation to freeze. Windy conditions may also be present during a winter storm. Severe winter weather, including snow storms, ice storms, and extreme cold, may affect any part of Howard County during winter. The annual snowfall for the County is 20.7 inches.



NATURAL HAZARDS (CONTINUED)



Solar Storm

Solar storms are a variety of eruptions of mass and energy from the solar surface. Flares, prominences, sunspots, and coronal mass ejections are the common harbingers of solar activity, as are plagues and other related phenomena seen at other wavelengths. They all involve sudden releases of stored magnetic energy, which accelerate the hot gases near the surface or in the corona of the sun. Sometimes these particles make it all the way to Earth and beyond by flowing along the Sun's magnetic field into interplanetary space. When the material collides with the earth's magnetic field and trapped radiation belts, particles can be dumped into our upper atmosphere to cause the Aurora. The same 'charged' particles can produce their own magnetic fields which can modify the earth's magnetic field and affect compass readings. The changing magnetic fields can also 'induce' electricity in long pipelines or produce electrical surges in our power grids leading to brown outs and black outs.

Tornado / Wind Storm

A tornado is "a violently rotating column of air, pendant from a cumuliform cloud or underneath a cumuliform cloud, and often (but not always) visible as a funnel cloud." Tornadoes are related to larger vortex formations, and therefore often form in convective cells such as thunderstorms or in the right forward quadrant of a hurricane, far from the hurricane eye. The NCDC database reports that nine tornadoes occurred in Howard County between 1975 and 2011. The database indicates there were four F0, three F1, and two F2 tornadoes.

Wildfire

Wildfires are uncontrolled forest fires, grassland fires, rangeland, or urban-interface fires which consume natural fuels and spread in response to the environment. Wildfires can be either natural phenomena or human-caused. The frequency and severity of wildfires depends on both weather and human activity. In Howard County the severity of wildfires has historically been very low, and the duration of wildfires has ranged from a matter of hours to several days.



ADVERSARIAL / INTENTIONAL HAZARDS

Chemical Attack

A Chemical Attack hazard results from the intentional release of potentially harmful chemicals into the environment. Agents used in Chemical Attacks include poisonous vapors, aerosols, liquids, and solids with toxic effects. All Howard County Chemical Attacks in recent history have been minor incidents. Local Chemical Attack hazards include a caustic powder thrown at an individual and the use of a chemical agent to destroy a yard and property.

Biological Attack

A Biological Attack is an intentional release of viruses, bacteria, or other germs (agents) used to cause illness or death in people, animals, or plants. Biological agents can be introduced and spread through a population by air, through water, through food, or through direct contact. There have been 0 confirmed Biological Attack hazard events in Howard County during the reviewed time period (1996-2014). However, suspicious powders and substances are frequently reported as biological hazards. Emergency responders in Howard County were called out to 17 biological hazard incidents between 2008 and 2013. None of these incidents were confirmed as legitimate Biological Attack hazards.

Radiological Attack

A Radiological Attack hazard occurs when a population is intentionally exposed to radiation through a non-nuclear mechanism. A Radiological Attack may take the form of a radiological exposure device (RED) or a radiological dispersal device (also known as a dirty bomb or RDD). There have been no Radiological Attack hazard events in Howard County during the reviewed time period (1996-2014).

Nuclear Blast

A Nuclear Blast is the result of a device that uses a nuclear reaction to create an explosion far more powerful than that of conventional explosives. When nuclear weapons or improvised nuclear devices (INDs) explode, the energy is violently released in the form of a blast wave, intense light, heat, and radiation. There has never been a Nuclear Blast hazard in Howard County (1945-2014).





ADVERSARIAL / INTENTIONAL HAZARDS (CONTINUED)



Active Shooter

An Active Shooter hazard refers to an individual actively engaging in killing or attempting to kill people in a confined or populated area. Active Shooter hazards are typically characterized by the assailant's intent to kill with no pattern or method to the selection of victims. Active Shooters typically use firearms and work alone. However, an Active Shooter hazard can involve multiple shooters and/or weapons other than firearms. There has been one Active Shooter hazard event in Howard County during the reviewed time period (1964-2014). The 2014 shooting at the Mall in Columbia resulted in three fatalities including that of the assailant.

Cyber / Communications Infrastructure Attack

A Cyber/Communications Infrastructure Attack is an intentional disruption or manipulation of the information and communication systems used to collect, filter, process, create, and distribute data. An attack of this type may seek to impact data or manipulate data to impact physical infrastructure. There has never been a successful emergency-level Cyber/Communications Infrastructure Attack in Howard County. However, every day Howard County experiences attacks that result in user impact, loss of access to information systems, and the need to repair or replace hardware or software. There are over 3,000 minor damaging Cyber/Communications Infrastructure Attacks in Howard County each year.

Explosives

An Explosives hazard occurs when an explosive device is intentionally used to cause harm to people, property, operational capacity, or the environment. There have been 0 successful Explosive attack hazard events in Howard County during the reviewed time period (2000-2014). However, there were 8 responses to confirmed Explosives threats in Howard County between 2010 and 2014, although all were disarmed prior to detonation.

Civil Unrest

Civil Unrest is often the result of ideological conflict and may include protests, riots, demonstrations, civil disobedience, and other forms of obstruction. Although many expressions of Civil Unrest are safe and legal, a Civil Unrest hazard occurs when the level of public disorder becomes a threat to health, safety, and property. There have been no Civil Unrest hazard events in Howard County during the reviewed time period (1996-2014).



TECHNOLOGICAL / ACCIDENTAL HAZARDS

Utility Disruption

A Utility Disruption hazard occurs when the disruption of the gas, water, or electrical infrastructure has the potential to cause harm. Utility Disruption hazards can be intentional, unintentional, or occur as a cascading effect of another hazard. There have been 15 emergency-level Utility Disruption hazard events in Howard County during the reviewed time period (2008-2014). The great majority of Utility Disruption hazards in Howard County have been the result of extreme weather.

Structure Fire

A Structure Fire hazard is an uncontrolled fire involving any building or structure. Structure Fires can occur in residential, commercial, or industrial settings. Fires can easily spread from one structure to another, and the size of a Structure Fire hazard is constantly evolving. There have been 2,222 Structure Fire responses in Howard County during the reviewed time period (2008-2013). The large majority of Structure Fire hazards in Howard County are residential cooking-related fires.

Transportation Hazard

A Transportation Hazard occurs whenever a vehicle accident or collision has the potential to cause harm. Any vehicle is capable of being involved in a Transportation Hazard. There have been 786 Transportation Hazard responses requiring extrication or rescue and an additional 960 vehicle fire responses in Howard County during the reviewed time period (2008-2013). Most Transportation Hazards in Howard County involve a small number of passenger vehicles, and only a very small percentage of accidents involve fatalities. Although rare, fatal Transportation Hazards involving train derailments and airplane crashes have occurred in Howard County.

Dam Failure

A Dam Failure hazard occurs when all or part of a dam's water-retaining barrier becomes damaged causing the uncontrolled release of water downstream. A Dam Failure hazard can be the result of insufficient maintenance, human error, internal erosion, and/or a design or construction error. Dam Failures can also occur as the result of an intentional attack or as a cascading effect of natural hazards such as flooding, earthquakes, or geological instability. Howard County is home to two high-hazard dams, five significant-hazard dams, and over 2,000 small earthen dams. There have been 3 confirmed Dam Failure hazard events in Howard County during the reviewed time period (1999-2014). All have been relatively minor.





TECHNOLOGICAL / ACCIDENTAL HAZARDS (CONTINUED)



Unintentional Chemical Substance Release / Hazmat

An Unintentional Chemical Substance Release/Hazmat hazard occurs when a chemical with the potential to cause harm is accidentally released into the environment. Chemical hazardous materials come in the form of poisons, explosives, and flammable and combustible substances. There have been 421 Unintentional Chemical Substance Release/Hazmat hazard responses involving chemical release, chemical reaction, or toxic conditions in Howard County during the reviewed time period (2008-2013). A large percentage involves hydrocarbon spills such as oil, gasoline, or diesel fuel. Unintentional Chemical Substance Release/Hazmat hazards are also common in residential settings and typically involve the accidental release of household chemicals.

Unintentional Biological Hazard

An Unintentional Biological Hazard is the natural or inadvertent spread of potentially harmful viruses, bacteria, parasites, or other biological disease-causing agents. Unintentional Biological Hazards typically result from the natural spread of infectious disease (epidemics/pandemics), but they may also result from the accidental release of biological agents from health care facilities, research institutions, or industrial operations. There has been 1 emergency-level Unintentional Biological Hazard event in Howard County during the reviewed time period (1994-2014). The 2009 H1N1 influenza virus epidemic infected an estimated 61 million Americans and resulted in an estimated 274,000 hospitalizations and 12,470 deaths.

Unintentional Radiological Substance Release

An Unintentional Radiological Substance Release hazard occurs when radiation is accidentally discharged into the environment. Unintentional Radiological Substance Release can occur as the result of a nuclear power plant accident, a transportation accident, or a workplace incident involving radioactive materials. While no nuclear power plants are located in Howard County, a portion of the County is located in the ingestion pathway zone for Peach Bottom Nuclear Power Plant. There have been no Unintentional Radiological Substance Release hazard events in Howard County during the reviewed time period (1996-2013).

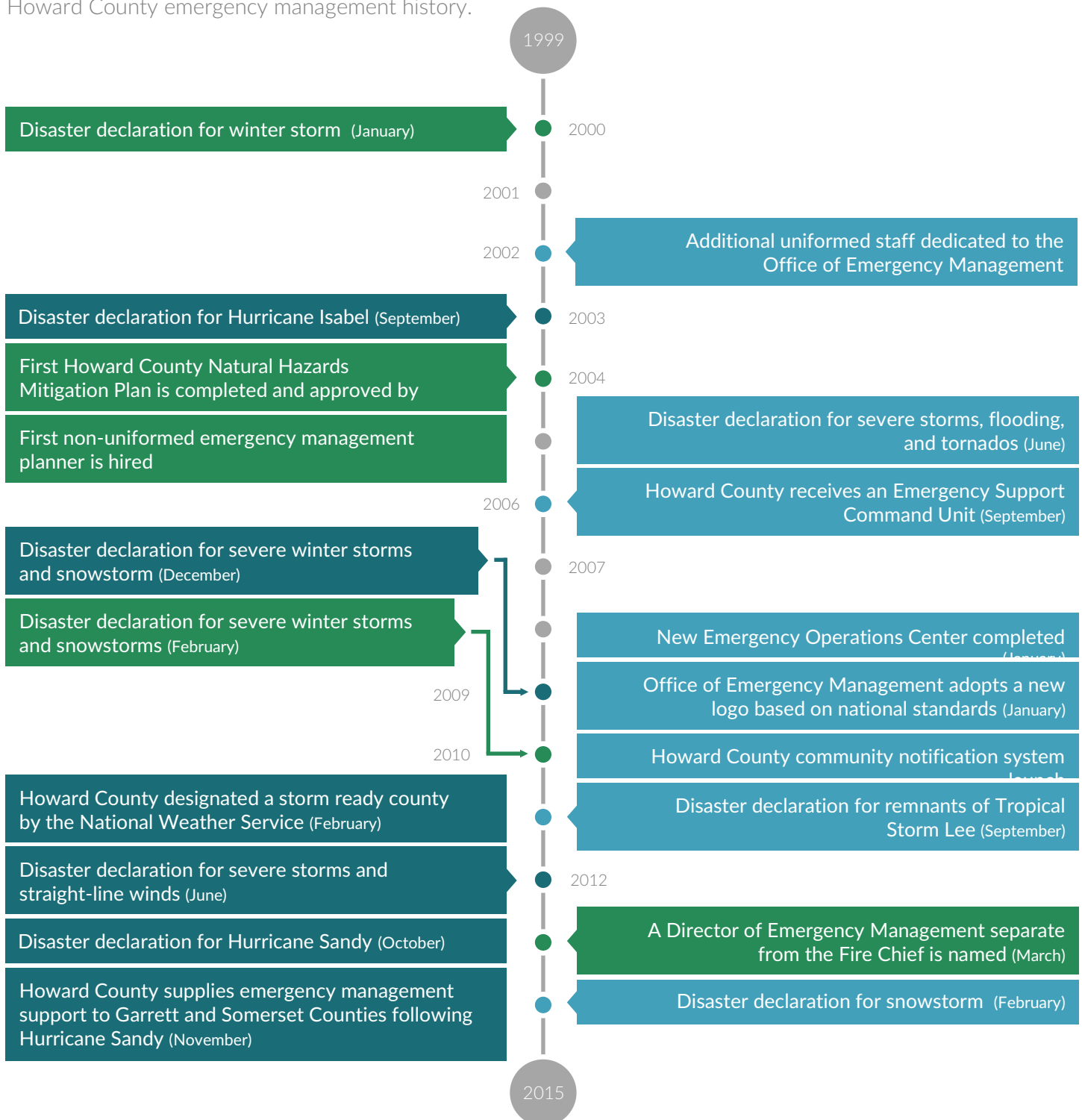
Unintentional Cyber / Communications Infrastructure Failure

An Unintentional Cyber/Communications Infrastructure Failure hazard occurs when an accidental disruption affects computerized data, information systems, or other communication systems. Unintentional failure may result from human error, infrastructure limitations, or the cascading effects of another hazard.



History of Howard County Emergency Management

This timeline demonstrates a handful of important moments and significant emergency incidents throughout Howard County emergency management history.





Mission and Vision

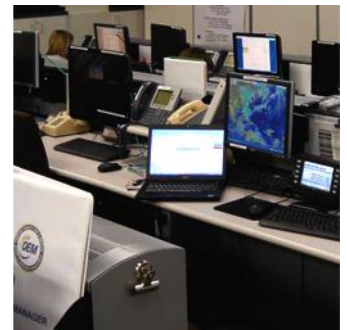
Key parts of any strategic plan are the vision, mission, and guiding principles. Together, the vision and mission help emergency management and homeland security stakeholders identify and prioritize strategic goals.

MISSION

The Howard County emergency management program's mission is to provide centralization, coordination, and facilitation of multi-agency emergency planning, and to minimize and reduce the impacts of natural and human-caused disasters through proactive prevention, mitigation, preparedness, response, and recovery.

VISION

The vision is of a resilient county that is safe, secure, and prepared for emergencies and disasters with the support of a robust emergency management program committed to protecting all residents, businesses, and visitors, to preserving the quality of life and the environment, and to quickly recovering and returning to normalcy whenever and however impacted.





Strategic Goals

SUMMARY OF STRATEGIC GOALS

Emergency management and homeland security stakeholders identified ten strategic goals:

- **Strategic Goal One**
Strengthen Howard County's capabilities to restore and stabilize government operations, economy, and community life.
- **Strategic Goal Two**
Further develop and strengthen the County Resiliency Program in order to coordinate countywide critical infrastructure protection, enhance critical infrastructure information security, and ensure that compatible continuity programs are developed and maintained for all Howard County departments.
- **Strategic Goal Three**
Prevent, protect, and mitigate against manmade and natural hazards.
- **Strategic Goal Four**
Tailor emergency management funding, projects, and planning initiatives according to the Hazard Identification and Risk Assessment (HIRA), Threat and Hazard Identification and Risk Assessment (THIRA), and any relevant risk and vulnerability assessments.
- **Strategic Goal Five**
Develop and implement a community outreach program and identify opportunities to foster relationships among individuals and community groups.
- **Strategic Goal Six**
Implement Emergency Management Accreditation Program (EMAP) standards and be considered a state leader in emergency management by developing major planning initiatives that are best practices.
- **Strategic Goal Seven**
Adopt a strategic planning process that holistically integrates planning, training, exercises, and evaluation, and that ensures plans are vertically and horizontally synchronized with appropriate departments, stakeholder agencies, and jurisdictions.
- **Strategic Goal Eight**
Maintain a formal training and exercise program that is driven by hazard vulnerabilities, corrective actions from after action reports, and gaps in capabilities and plans.
- **Strategic Goal Nine**
Continually improve Emergency Operations Center (EOC) and Departmental Operation Centers (DOCs) functions and capabilities.
- **Strategic Goal Ten**
Enhance and expand partnerships and collaboration with Non-Governmental Organizations (NGOs), faith-based organizations, the private sector, and public sector agencies.



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Achieving these goals will lead to the realization of the County's emergency management and homeland security vision. The strategic goals were cross-walked to FEMA's core capabilities list and support the best practices described in the EMAP standards. The connection between the goals and national priorities is demonstrated below.

CORE CAPABILITY	GOAL ONE	GOAL TWO	GOAL THREE	GOAL FOUR	GOAL FIVE	GOAL SIX	GOAL SEVEN	GOAL EIGHT	GOAL NINE	GOAL TEN
Access Control and Identity Verification		●								
Community Resilience			●	●	●	●				●
Critical Transportation							●	●		
Cybersecurity		●								
Economic Recovery	●									
Environmental Response / Health and Safety							●	●		
Fatality Management Services							●	●		
Forensics and Attribution										
Health and Social Services	●									
Housing	●	●								
Infrastructure Systems							●	●		
Intelligence and Information Sharing		●								
Interdiction and Disruption										
Long-Term Vulnerability Reduction			●		●					
Mass Care Services							●	●		
Mass Search and Rescue Operations							●	●		
Natural and Cultural Resources	●									
On-Scene Security and Protection							●	●		
Operational Communications		●					●	●	●	
Operational Coordination							●	●	●	
Physical Protective Measures		●								
Planning	●	●	●	●	●	●	●	●	●	●
Public and Private Services and Resources							●	●	●	●
Public Health and Medical Services							●	●		
Public Information and Warning			●		●		●	●		
Risk and Disaster Resilience Assessment			●	●	●					
Risk Management for Protection Programs and Activities		●								
Screening, Search, and Detection										
Situational Assessment							●	●	●	
Supply Chain Integrity and Security										
Threats and Hazard Identification				●		●				



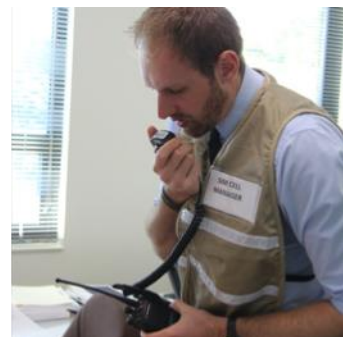
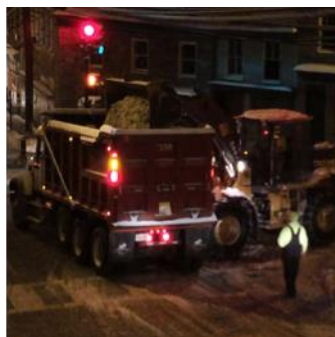
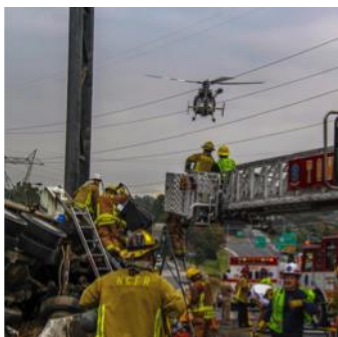
EMERGENCY MANAGEMENT STRATEGIC PLAN Howard County, Maryland

Many of the strategic goals are interconnected, in that milestones and activities of one strategic goal complement or advance the achievement of another. Another characteristic of certain strategic goals are their foundational properties. Certain strategic goals must be achieved first in order to provide the “foundation” for accomplishing another strategic goal. It is important to note that the core capabilities indicated on the attached chart do not represent the entirety of the core capabilities currently being implemented in Howard County. These objectives are not meant to serve as a complete accounting of all the emergency management and homeland security projects currently underway. Additionally, these capabilities do not necessarily represent areas that the County has identified as needing improvement. Instead, these goals and objectives, as well as the core capabilities they align with, are meant to identify the areas that Howard County has prioritized to receive enhanced focus over for the next five years. A chart cross-walking Howard County’s goals and objectives to all 31 FEMA Core Capabilities can be found in Appendix A (the cross-walk is based on FEMA capability definitions last updated in July 2014).

Following each of the strategic goals is a list of objectives and sample performance indicators. The objectives offer insight on how the County plans to achieve the strategic goal. The sample performance indicators suggest how the County can demonstrate achievement of the strategic goals.

STRATEGIC GOALS AND OBJECTIVES

For each strategic goal, a set of objectives were identified and prioritized. These objectives are intended to ensure that goals are achieved within the next five years. Although this Strategic Plan does not specifically outline goals and objectives beyond five years, some goals will continue to be enhanced and changed during the life cycle of this Plan.





Strategic Goal One



Strengthen Howard County's capabilities to restore and stabilize government operations, economy and community life.

OBJECTIVES

- Develop plans for a post-disaster business and nonprofit economic recovery advisory taskforce to ensure that County recovery planning addresses economic recovery.
- Develop a recovery plan complete with short-term and long-term recovery strategies.
- Develop plans to establish a County Disaster Recovery Center to provide operational disaster assistance to the community following a disaster.

SAMPLE PERFORMANCE INDICATORS

- Development of a Recovery Plan.
- Integration of the Howard County Recovery Plan with Regional, State, and Federal Recovery Planning efforts.



Strategic Goal Two



Further develop and strengthen the County Resiliency Program in order to coordinate countywide critical infrastructure protection, enhance critical infrastructure information security, and ensure that compatible continuity programs are developed and maintained for all Howard County departments.

OBJECTIVES

- Reconfirm and synchronize assets designated by County, State, and Federal Governments.
- Establish an asset-specific risk assessment program element of Critical Infrastructure Protection and a standardized format for future tracking, trending, and validation.
- Coordinate all County Critical Infrastructure Information (CII) and recommend designation of such information as Protected Critical Infrastructure Information to the Protected Critical Infrastructure Information Management System (PCIIMS) for the Department of Homeland Security (DHS) as necessary.
- Manage Continuity of Operations (COOP) training and coordinate countywide COOP uniformity and development.
- Develop a Critical Infrastructure and Key Resources database to streamline communication and alerts to external stakeholders.
- Develop a CIP assessment cadre (contract annually, hire Resiliency Assessors, or designate County Employees and train to self-assess).
- Develop systems to consolidate and disseminate information to stakeholders.
- Establish a formalized Howard County Resiliency Program "structure" with identified roles and responsibilities, decision-making authority, funding/budget, and policy and procedures.

SAMPLE PERFORMANCE INDICATORS

- Critical Infrastructure and Key Resources database developed.
- Number of departments that attend COOP training.
- Updated and coordinated COOP plans for all departments.



Strategic Goal Three

Prevent, protect, and mitigate against manmade and natural hazards.

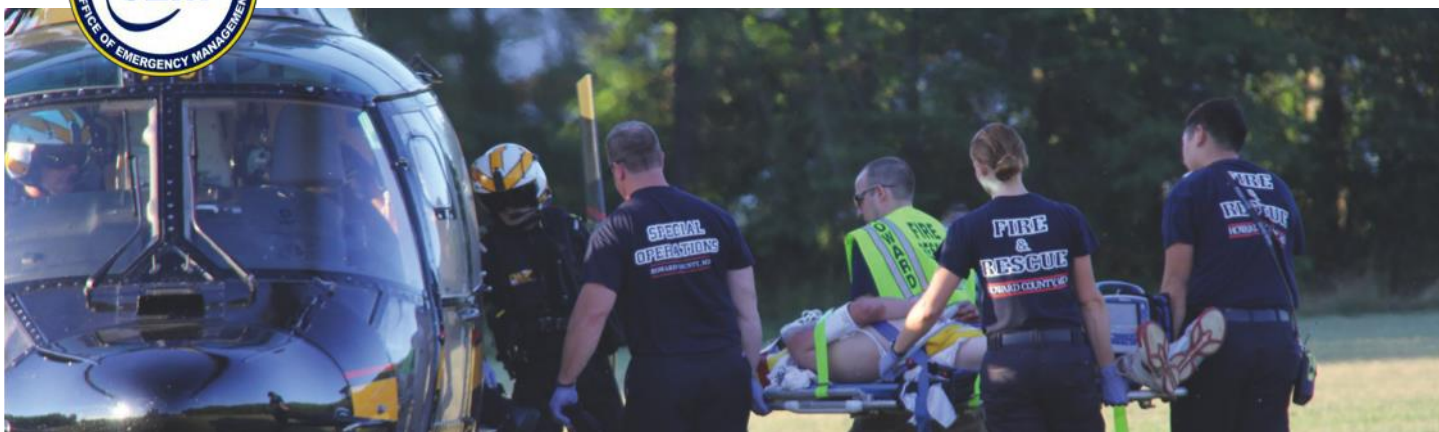


OBJECTIVES

- Maintain, improve, and update the mitigation plan.
- Synchronize the timelines of all mitigation planning activities.
- Seek additional mitigation grant funding and ensure match availability as applicable.
- Expand mitigation plan to include manmade hazards.
- Initiate the mitigation steering committee to implement mitigation planning objectives and strategies.
- Integrate mitigation plans with Department of Planning and Zoning plans.
- Create an accountability plan for mitigation action items.

SAMPLE PERFORMANCE INDICATORS

- Hazard Mitigation Plan that includes manmade hazards.
- Mitigation Steering Committee meeting minutes and agendas.
- County mitigation project progression.



Strategic Goal Four



Tailor emergency management funding, projects, and planning initiatives according to the HIRA, THIRA, and any relevant risk and vulnerability assessments.

OBJECTIVES

- Use risk and vulnerability assessments to determine funding priorities, and to direct county investments towards increasing preparedness, reducing risk, and increasing the capacity to respond and recover.
- Base mitigation priorities on the findings from risk and vulnerability assessments.
- Update and review risk and vulnerability assessments on a regular cycle.
- Use risk and vulnerability assessments to identify gaps in planning and resources.

SAMPLE PERFORMANCE INDICATORS

- Development of updated risk and vulnerability assessments.
- Development of a gap analysis.



Strategic Goal Five



Develop and implement a community outreach program and identify opportunities to foster relationships among individuals and community groups.

OBJECTIVES

- Provide easy to understand information on hazard risks to residents of high-risk areas to encourage them to take action to reduce risks and build resilience.
- Lead the content and dissemination efforts of county public information officers with county and regional partners to ensure messages resonate with targeted and general audiences.
- Coordinate and expand community outreach efforts and actively establish and maintain partnerships with community leaders.
- Ensure that pre-disaster preparedness, mitigation information, and post-disaster assistance programs and services are available to all people in the community.
- Develop a plan to provide leadership and support, through guidance documents and dissemination of best practices, to encourage businesses and nonprofits to prepare mitigation and recovery plans.
- Develop a process to identify community hot button issues both for preparedness information before a disaster and to focus post-disaster information on the real questions and needs of the community. Include plans to get public comment from affected communities after a disaster.
- Post to social media or the Howard County Office of Emergency Management website with information pertaining to preparation. Allow people to post responses, concerns, or comments.
- Identify and target community preparedness education efforts for communities without adequate resources.

SAMPLE PERFORMANCE INDICATORS

- Social Media Metrics.
- Number of community emergency preparedness trainings held.



Strategic Goal Six



Implement Emergency Management Accreditation Program (EMAP) standards and be considered a state leader in emergency management by developing major planning initiatives that are best practices.

OBJECTIVES

- Continue to use EMAP standards as a basis for evaluating the County's emergency management program.
- Receive consistent positive evaluations from the public on community response surveys regarding County emergency management programs.

SAMPLE PERFORMANCE INDICATORS

- EMAP Accreditation.
- Community Response Survey Evaluation Scores.



Strategic Goal Seven

Adopt a strategic planning process that holistically integrates planning, training, exercises, and evaluation, and that ensures plans are vertically and horizontally synchronized with appropriate departments, stakeholder agencies, and jurisdictions.

OBJECTIVES

- Ensure that the County's emergency management program (including mitigation, preparedness, response, recovery, and training) integrates planning efforts for the whole community.
- Continue formal after action reports and corrective action management for all external and internal emergencies.
- Further develop and update county level emergency plans to include: a Continuity of Government Plan; Recovery Plan; Communications Plan; Public Information Plan; and a Public Outreach Plan.
- Ensure emergency management program maintenance is followed accordingly and plans are reviewed and updated as necessary.
- Ensure that progress is made on correcting gaps identified during the after action process.
- Maintain records of plan maintenance and of corrective actions on plans exercised or tested during real or planned events.
- Continue to standardize emergency procedures, protocols, and policies throughout the County in order to promote a unified response when necessary.

SAMPLE PERFORMANCE INDICATORS

- Corrective Action Management System.
- Number of Corrective Actions Tracked and Corrected.
- Records of plan maintenance and updates.



Strategic Goal Eight



Maintain a formal training and exercise program that is driven by hazard vulnerabilities, corrective actions from after action reports and gaps in capabilities and plans.

OBJECTIVES

- Develop a training and exercise program that includes the development of a training and exercise plan on a three-year cycle.
- Ensure training and exercises are implemented as appropriate to evaluate and improve capabilities, preparedness, plans, strategies, and operational readiness in a fault-free environment.
- Ensure revised plans or newly created plans are trained on and followed with appropriate exercise building blocks.
- Incorporate and organize training opportunities for officials and emergency management and response personnel, as well as the public in an effort to improve inter and intra departmental collaboration.
- Pursue specialized training, credentialing, and emergency management education, and increase availability for stakeholders and communities.
- Encourage membership with appropriate emergency management associations and support organizations for Howard County Office of Emergency Management staff.

SAMPLE PERFORMANCE INDICATORS

- Number of trainings attended by Howard County Office of Emergency Management staff and emergency management stakeholders.
- Number of County departments that follow and use the exercise strategy.
- Percent of County exercises that are developed and conducted using Homeland Security Exercise and Evaluation Program (HSEEP) methodology.



Strategic Goal Nine



Continually improve Emergency Operations Center (EOC) and Departmental Operation Centers (DOCs) functions and capabilities.

OBJECTIVES

- Capitalize on the growing use of social media and develop protocols for its use in emergencies to monitor and aggregate crowd-sourced data, disseminate real time information, and assess rapidly changing conditions.
- Build out a planning unit in the EOC.
- Ensure appropriate plans are in place for the use of spontaneous donations and volunteers following a major disaster.
- Develop a resource management system, complete with an inventory of equipment and medical supplies, and with information for appropriate agencies on location and availability as well as accessibility directions.
- Pursue building a permanent "state of the art" EOC to nationally accepted standards in a strategic location within the County.
- Ensure the EOC and County DOCs are properly equipped to meet planning, training, exercise, and activation needs.
- Add a Safety Officer position and a Resources position to the EOC position manual. Draft position guidance, train on the positions, and incorporate the positions into EOC based exercises.
- Maintain a Joint Information System with current information on hazards and activities to prevent injuries and property loss in Howard County.

SAMPLE PERFORMANCE INDICATORS

- EOC Position Manual.
- Resource Management System.



Strategic Goal Ten



Enhance and expand partnerships and collaboration with Non-Governmental Organizations (NGOs), faith-based organizations, the private sector, and public sector agencies.

OBJECTIVES

- Improve private-sector knowledge of County government plans and procedures, and vice-versa.
- Link businesses together with government resources to create a resource network for emergency events to enable the marshalling of resources to confront novel or complex disasters.
- Ensure community preparedness for and rapid recovery from disaster threats in Howard County and the region by providing businesses with encouragement and with the tools to assess their risks and to develop appropriate plans.
- Develop an effective system of coordinating private-sector response and resources in times of emergency.
- Increase private-sector involvement, information, tools, and education in countywide preparedness and recovery.
- Match private-sector resource providers with appropriate Essential Support Functions (ESF), and facilitate relationship-building and resource identification opportunities.
- Explore the possibility of developing a mentoring program to assist businesses to create emergency plans and be better prepared.

SAMPLE PERFORMANCE INDICATORS

- Number of Business Emergency Plans Developed.
- Protocols for Coordination with Private Sector Partners during Emergencies.



Plan Implementation and Maintenance

The Strategic Plan is a living document that will be updated every year to incorporate changes in priorities, funding, threat environments, and organizational and political structures. In January of each year, the Strategic Plan and Annual Report from the previous year will be discussed at the Emergency Management Operations Group (EMOG) meeting to determine if any goals need to be modified, subtracted, or added. During the EMOG meetings held in February through November, one respective goal will be discussed in depth. The goals will not necessarily be discussed in the order they are presented in the Strategic Plan. Instead, the discussion order will be based on progress made toward achieving objectives and/or align with monthly events (e.g., Cybersecurity month, a large exercise, the roll out of a new plan, etc.). In the month of November, a survey will be disseminated to all EMOG members to collect metrics related to goal progress. Discussion from the monthly EMOG meetings and the information gathered from the survey will then be used to draft an Annual Report in December.

